REMARKS

This is responsive to the Office Action mailed November 16, 2006.

Section 102 Rejections

Independent claims 1, 9, 20, and 21 remain in the application and are all rejected under 35 U.S.C. §102(b) as being anticipated by Crammond, U. S. Patent No. 5,485,873; Bielagus et al., U.S. Patent No. 5,937,923; and Swartwood et al., U.S. Patent No. 5,979,522; and are rejected under 35 U.S.C. §102(e) as being anticipated by Loth, U.S. Patent No. 6,561,885. Applicant respectfully traverses the rejections.

While the ground of rejection was broadly recited, addressing it requires considering each independent claim and each reference separately, because each combination of claim and reference is different.

Crammond

The rejections on Crammond (referring to Figure 7 and Col. 4, line 55 - 66) are based on the knife 60, the "knife carrier 58" (identified as the claimed "base"), the "counterknife 68" (identified as the claimed "wearshoe"), the "clamping member 65" (having an inclined surface 66), and the bolt 70.

Claims 1 - 5, 18, 19, and 27

These claims all require that there be a gap between the upper clamping member and the wearshoe that is greater than the thickness of the knife. No such gap is disclosed in Crammond. The Examiner asserts that there is such a gap, but the law requires that there be a disclosure in the reference or there is no anticipation.

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Claims 7, 20, and 28

These claims all require that the wearshoe and base include "cooperatively interlocking portions adapted to substantially prevent movement of said base, relative to said wearshoe, in a first direction toward the knife and perpendicular to the axis of said bolt, said interlocking portions meeting so as to define an angle φ with respect to said first direction that is in the range 45 - 60 degrees."

The rejections do not present a *prima facie* case against claims 7, 20, and 28 because there is no showing that Crammond has cooperatively interlocking features as required by the claims. Moreover, it is clear from Figure 7 that the structure 58 and the structure 68 meet each other at angles that are orthonormal (i.e., either parallel or perpendicular) to the axis of the bolt 70.

Claims 9 - 11, 17, 22, 23, and 25

These claims all require end plates such that shoulder portions of at least two shoulder bolts extend through one of the end plates into the base.

The rejections do not present a *prima facie* case against claims 9 - 11, 17, 22, 23, and 25 because there is no showing that Crammond uses shoulder bolts to mount an end plate to the knife carrier 58. In fact, Figure 3 shows that the knife carrier 26 (equivalent to the knife carrier 58 of Figure 7) is not bolted to the annular ring 4 at all; rather, as explained at col. 3, lines 20 - 33, it is bolted to a "knife holding location 8" by fasteners 28, which are not shoulder bolts, and which do not extend through the ring.

Additional Note Concerning the Relevance of Crammond

While the rejections lack foundation for at least the reasons described above, even

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assuming that the claimed "base" reads on the "knife carrier 58," and the claimed "wearshoe" reads on the "counterknife 68," it should also be understood for the record that the terms "counterknife" and "wearshoe" are both terms of art and are not synonymous.

Bielagus

The rejections on Bielagus (referring to Figure 5 and col. 3, lines 31-32; 45-46; and col. 6, lines 8-15) are based on the knife 36, the "drum segment 34" (identified as the claimed "base"), the structure identified by the Examiner as 42 (which is however actually described as being the "inside surface 42 of the drum segments 34"), and the "clamp wedge 76" and bolt 78.

Claims 1 - 5, 18, 19, and 27

These claims all require that the claimed upper clamping member be "cantilevered" from the base. A cantilever is "a projecting beam or member supported at only one end." Webster's Ninth New Collegiate Dictionary (1991 ed., page 203; copy enclosed). It is clear from Figure 3 that the clamping wedge 76 is not cantilevered because it is supported at two ends.

The claims all require that there be a gap between the upper clamping member and the wearshoe that is greater than the thickness of the knife. No such gap is disclosed in Bielagus. The Examiner asserts that there is such a gap, but the law requires that there be a disclosure in the reference or there is no anticipation.

Claims 7, 20, and 28

The claims all require a bolt mounting a wearshoe and base together at one side of the base, where the base and wearshoe "include cooperatively interlocking portions adapted to substantially prevent movement of said base, relative to said wearshoe, in a first direction toward

the knife and perpendicular to the axis of said bolt, said interlocking portions meeting so as to define an angle φ with respect to said first direction that is in the range 45 - 60 degrees."

The rejections do not present a *prima facie* case against claims 7, 20, and 28 because there is no showing that Bielagus has cooperatively interlocking features as required by the claims. Moreover, it is clear from Figures 5 and 6 that the only possible interlocking features of the structure 34 and the structure 42 are orthonormal to the axis of the bolt mounting these structures together.

Claims 9, 10, 11, 17, 22, 23, and 25

These claims all require end plates such that shoulder portions of at least two shoulder bolts extend through one of the end plates into the base.

The rejections do not present a *prima facie* case because Bielagus does not disclose any means for attaching the structure 34 to the "annular ring 132" shown in Figure 9.

Swartwood

The rejections on Swartwood (referring to Figure 1) are based on the knife 12, the base 50 (which includes the pivot point 22), the bottom clamping portion 16 (identified as the claimed "wearshoe"), the top clamping portion 14, and the bolt 40.

Claims 1 - 5, 18, 19, and 27

These claims all require that there be a gap between the upper clamping member and the wearshoe that is greater than the thickness of the knife. Unlike the other two references, Swartwood discloses a gap. However, the claims further require that the apparatus be adapted to close the gap by elastically deflecting the upper clamping member. In Swartwood, the gap is closed by pivoting the lower clamping portion, not by deflecting the upper clamping member

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downwardly to meet the knife. Accordingly, Swartwood does not anticipate claims 1 - 5, 18, 19, and 27.

Claims 7, 20, and 28

These claims all require that the wearshoe and base include "cooperatively interlocking portions adapted to substantially prevent movement of said base, relative to said wearshoe, in a first direction toward the knife and perpendicular to the axis of said bolt, said interlocking portions meeting so as to define an angle φ with respect to said first direction that is in the range 45 - 60 degrees."

The rejections do not present a *prima facie* case against claims 7, 20, and 28 because there is no showing that Swartwood has cooperatively interlocking features as required by the claims. Moreover, it is clear from Figures 2 and 3 that the structure 16 and the structure 50 meet each other along a curved surface (at 22), so that there are no angles.

Claims 9 - 11, 17, 22, 23, and 25

These claims all require end plates such that shoulder portions of at least two shoulder bolts extend through one of the end plates into the base.

The rejections do not present a *prima facie* case against claims 9 - 11, 17, 22, 23, and 25 because there is no showing that Swartwood uses shoulder bolts to mount an end plate to the base 50. In fact, Swartwood does not have a ring assembly or end plates in the first place.

Additional Note

While the rejections lack foundation for at least the reasons described above even assuming that the claimed "wearshoe" reads on the "bottom clamping portion 16," it should also be understood for the record that the term "wearshoe" is a term of art and that the bottom

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clamping portion 16 is not a wearshoe (so, among other things, the gap required in claim 1 is not disclosed in Swartwood).

Loth

The rejections on Loth (referring to Figure 2 and col. 2, lines 15 - 33) are based on the knife 1.1, the "knife carrier 1.2" (identified as the claimed "base"), the "wearing [abrasion] plate 1.6" (identified as the claimed "wearshoe"), the "clamping plate 1.3" (identified as the claimed "upper clamping member"), and the "fastening screw 4" (having the "nut element 4.1").

Claims 1 - 5, 18, 19, and 27

These claims all require that there be a gap between the upper clamping member and the wearshoe that is greater than the thickness of the knife. No such gap is disclosed in Loth. The Examiner asserts that there is such a gap, but the law requires that there be a disclosure in the reference or there is no anticipation.

Claims 7, 20, and 28

These claims all require that the wearshoe and base include "cooperatively interlocking portions adapted to substantially prevent movement of said base, relative to said wearshoe, in a first direction toward the knife and perpendicular to the axis of said bolt, said interlocking portions meeting so as to define an angle φ with respect to said first direction that is in the range 45 - 60 degrees."

The rejections do not present a *prima facie* case against claims 7, 20, and 28 because there is no showing that Loth has cooperatively interlocking features as required by the claims. Inspection of Figure 2 of Loth shows no interlocking features inclined by the angle θ defined in the claims.

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Claims 9 - 11, 17, 22, 23, and 25

These claims all require end plates such that shoulder portions of at least two shoulder bolts extend through one of the end plates into the base.

The rejections do not present a *prima facie* case against claims 9 - 11, 17, 22, 23, and 25 because there is no showing that Loth uses shoulder bolts to mount an end plate to the knife carrier 58. The bolts shown in Figure 3 of Loth appear to be ordinary bolts.

Additional Note Concerning the Relevance of Swartwood

While the rejections lack foundation for at least the reasons described above even assuming that the claimed "base" reads on the "knife carrier 58," and the claimed "wearshoe" reads on the "counterknife 68," it should also be understood for the record that the terms "counterknife" and "wearshoe" are both terms of art and are not synonymous.

Conclusion

It is respectfully submitted that all the claims are in condition for allowance, and the Examiner is therefore respectfully requested to pass the case to issue.

Respectfully submitted,

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'cap v capped; capping (15c) 1 a: to provide or protect with a cap b: to give a cap to as a symbol of honor, rank, or achievement 2: to form a cap over: CROWN (the mountains were capped with mist—John Buchan) 3 a: to follow with something more noticeable or more significant: OUTDO b: CLIMAX capability \(\frac{1}{2} \) \(

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